

# **Section I**

## **Conformity Requirements & Findings**

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## **CONFORMITY REQUIREMENTS AND FINDINGS**

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# ***CONFORMITY REQUIREMENTS AND FINDINGS***

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## ***PREFACE***

The federally required conformity analyses and findings for the 2008 RTIP are set forth in the following sections. The conformity sections cover all federally required analyses for the conformity determination of the 2008 RTIP. These analyses also update the 2008 RTP. All transportation and air quality conformity analyses in this document are in compliance with applicable federal and state law, including conformity and transportation planning regulations. This Technical Appendix contains three sections (i.e., Section I, II, and III) that specifically address the conformity analyses required for federal approval.

- Section I summarizes the conformity requirements and findings.
- Section II provides modeling methodologies and assumptions and results of the regional emissions analyses for the 2008 RTIP.
- Section III reports on the timely implementation of Transportation Control Measures (TCMs) and describes the implementation status of all applicable TCMs in the SCAG region.

## ***STATE AND FEDERAL REQUIREMENTS***

SCAG, the MPO for Southern California, is mandated to comply with federal and state transportation and air quality regulations. Federal transportation regulations authorize federal funding for highway, highway safety, transit, and other surface transportation programs. The federal CAA establishes air quality standards and planning requirements for various air pollutants.

### **Regional Transportation Plan and Regional Transportation Improvement Program**

Federal transportation law requires that SCAG develop a Regional Transportation Plan (RTP) for a 20-year minimum period. Additionally, SCAG must develop a RTIP that allocates monies over a four-year period to implement the RTP. In the federal non-attainment or maintenance areas, the RTP and RTIP must comply with the transportation conformity requirements of the EPA Transportation Conformity Regulations.

The biennial RTIP update is produced on an even-year cycle, and is consistent with the State Transportation Improvement Program (STIP) cycle.

## **Federal Non-Attainment and Maintenance Areas**

The U.S. EPA may make a federal “non-attainment area” designation to any area that has not met CAA health standards for one or more pollutants. A non-attainment area designation may require additional air-quality controls for transportation plans, programs, and projects. The ARB recommends the federal non-attainment area boundaries to U.S. EPA for final designations. Subsequently, the EPA finalizes and defines the boundaries of the federally designated non-attainment areas for each criteria pollutant.

## **State Implementation Plans**

To comply with the CAA in achieving the NAAQS, the ARB develops SIPs for federal non-attainment and maintenance areas. In California, SIP development is a joint effort of the local air agencies and ARB working with federal, state, and local agencies (including the MPOs). Local AQMPs are prepared in response to federal and state requirements.

In California, all SIPs have to go through three steps: air district action, ARB action, and finally EPA action. Each air district submits its respective AQMPs/SIPs to ARB. ARB is the official State agency that submits the SIPs to EPA for all federal non-attainment and maintenance areas in California.

The SIP includes two important components relative to transportation and air quality conformity requirements – emissions budgets and TCMs. Emissions budgets set an upper limit which transportation activities (motor vehicles also known as on-road mobile sources) are permitted to emit. TCMs are strategies to reduce emissions from on-road mobile sources. The 2008 RTP must conform to the applicable SIPs [i.e., emissions budgets and TCMs] in the SCAG region.

## **Federal Transportation Conformity Rule**

Transportation conformity is required under CAA section 176(c) to ensure that federally supported highway and transit project activities “conform to” the purpose of the SIP. Conformity currently applies to areas that are designated non-attainment, and those re-designated to attainment after 1990 (“maintenance areas” with plans developed under CAA section 175[A]) for the specific transportation-related criteria pollutants. Conformity to the purpose of the SIP means that transportation activities will not cause new air quality violations, worsen existing violations, or delay timely attainment of the relevant NAAQS. The transportation conformity regulation is found in 40 CFR part 93 and provisions related to conformity SIPs are found in 40 CFR 51.390.

## ***CLEAN AIR ACT DESIGNATIONS IN THE SCAG REGION***

Transportation activities, particularly motor vehicles (on-road mobile sources), are major causes of air pollution. Four criteria pollutants are subject to air quality conformity for the RTP and RTIP:

- Carbon Monoxide (CO) - a product of automobile exhaust. CO reduces the flow of oxygen in the bloodstream and is particularly dangerous to persons with heart disease.
- Ozone - formed by the reaction between volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) in the presence of sunlight. Ozone negatively impacts the respiratory system.
- Nitrogen Dioxide (NO<sub>2</sub>) - created under the high pressure and temperature conditions in internal combustion engines. It impacts the respiratory system and degrades visibility due to its brownish color.
- Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>) - extremely small particles and liquid droplets associated with dust, soot and combustion products. Particulate pollution has been linked to significant health problems, including aggravated asthma, increases in adverse respiratory systems, chronic bronchitis, decreased lung function, and premature death.

### **Air Basins and Air Districts in the SCAG Region**

SCAG is a six-county region that contains four air basins administered by five air districts:

- The South Coast Air Basin (SCAB) covers the urbanized portions of the Los Angeles, Riverside, and San Bernardino counties as well as the entire County of Orange and is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD).
- The Ventura County portion of the South Central Coast Air Basin (SCCAB) covers Ventura County and is within the jurisdiction of the Ventura County Air Pollution Control District (VCAPCD).
- The Mojave Desert Air Basin (MDAB) covers the desert portions of Los Angeles, Riverside, and San Bernardino counties. A small portion of this air basin is in Kern County and outside of the SCAG region. The SCAG portion of this air basin is under the jurisdiction of three air districts:
  - The Mojave Desert Air Quality Management District (MDAQMD) administers portions of the MDAB situated in San Bernardino County and eastern Riverside County. The Riverside County portion is known as the Palo Verde Valley Area.
  - The SCAQMD administers the portion of MDAB in Riverside County situated between the Salton Sea Air Basin (SSAB) and the Palo Verde Valley Area.
  - The Antelope Valley Air Quality Management District (AVAQMD) administers the Los Angeles County portion of the MDAB.
- The SSAB covers all of Imperial County and the eastern portion of Riverside County (excluding the MDAB portion). This air basin is under jurisdiction of two air districts:
  - The Imperial County Air Pollution Control District (ICAPCD) administers the Imperial County portion of the SSAB.
  - The SCAQMD administers the Riverside County portion of the SSAB situated between the SCAB and the MDAB.

### **Non-Attainment / Maintenance Areas in the SCAG Region**

The federal non-attainment/maintenance areas in the SCAG region are:

- Ventura County Portion of SCCAB – non-attainment area for 8-hour ozone

- SCAB – non-attainment or maintenance area for: NO<sub>2</sub> ; CO; PM<sub>10</sub>; PM<sub>2.5</sub>; and 8-hour ozone
- Western MDAB (Antelope Valley portion of Los Angeles County and San Bernardino County portion of MDAB excluding Searles Valley) – non-attainment area for 8-hour ozone
- San Bernardino County portion of MDAB:
  - Searles Valley – non-attainment for PM<sub>10</sub>
  - San Bernardino County (excluding the Searles Valley area) – non-attainment area for PM<sub>10</sub>
- Riverside County Portion of SSAB (Coachella Valley) – non-attainment area for: PM<sub>10</sub> and 8-hour ozone
- Imperial County Portion of SSAB – non-attainment for 8-hour ozone and PM<sub>10</sub>

The boundaries of the air basins, air districts, and non-attainment and maintenance areas are illustrated in Exhibit A at the end of the report.

### **Applicable Emissions Budgets in the SCAG Region**

For the 2008 RTP conformity determination, the applicable emissions budgets are established in the SIPs as described below:

- Ventura County Portion of SCCAB
  - 2008 8-Hour Ozone Early Progress Plan
- SCAB
  - 2007 Ozone SIP (using budgets deemed adequate by U.S. EPA May 2008)
  - 2007 PM<sub>2.5</sub> SIP (using budgets deemed adequate by U.S. EPA May 2008)
  - 2007 CO SIP (Maintenance Plan)
  - 2007 NO<sub>2</sub> SIP (Maintenance Plan)
  - 2003 PM<sub>10</sub> SIP
- Riverside County Portion of SSAB (Coachella Valley)
  - 2008 8-Hour Ozone Early Progress Plan
  - 2003 PM<sub>10</sub> SIP
- Western MDAB (Antelope Valley and portion of Los Angeles County and San Bernardino County portion of MDAB excluding Searles Valley)
  - 2008 8-Hour Ozone Early Progress Plan
- Imperial County Portion of SSAB (Ozone)
  - 2008 8-Hour Ozone Early Progress Plan

### **SIP Status in Other Areas of the SCAG Region**

In absence of the applicable emissions budgets for conformity, SCAG has to conduct interim emissions tests for regional emissions analysis of the 2008 RTP. At the present time, there is no federally approved SIP for the following areas.

- San Bernardino County Portion of MDAB (PM<sub>10</sub>)
- Searles Valley Portion of MDAB (PM<sub>10</sub>)

- Imperial County Portion of SSAB (PM10)

### **Applicable TCMs**

The SIP documents for the applicable TCMs in the SCAG region are listed below:

- SCAB – The TCM01 established in the 1994 Ozone SIP functions as the applicable TCM categories for the conformity finding (timely implementation of TCM analysis). The TCM categories in the 2007 AQMP/SIP as well as the 2003 Ozone AQMP/SIP and the 1997 (as amended in 1999) Ozone AQMP / SIP are consistent with the TCM01 categories listed in the 1994 Ozone AQMP/SIP.
- The Ventura County portion of SCCAB – The TCM strategies incorporated in the 1994 (as amended in 1995) Ozone AQMP/SIP function as the applicable TCMs for conformity finding. Note, the 2004 Ozone AQMP/SIP was prepared to address new motor vehicle emissions budgets. No changes were made to the TCM strategies listed in the 1994 (as amended in 1995) Ozone AQMP/SIP.

It should be noted that while the 1-hour ozone standard has been revoked and replaced with an 8-hour ozone standard, the TCMs in the 1-hour ozone SIPs remain applicable.

There are no applicable TCMs in any other federal non-attainment or maintenance areas in the SCAG region. For more information on TCMs and timely implementation of the TCMs, see Section III of this document.

### ***CONFORMITY STATUS OF CURRENT RTP AND RTIP***

On May 8, 2008, the SCAG Regional Council approved the conformity finding for the 2008 RTP. SCAG has forwarded the 2008 RTP, adopting resolution, and other supporting materials to FHWA and FTA for review and approval.

On June 7, 2004, the federal conformity determination for the 2004 RTP was issued for the following non-attainment and maintenance areas:

- SCAB (ozone, CO, NO<sub>2</sub>, and PM<sub>10</sub>)
- San Bernardino County portion of MDAB (PM<sub>10</sub>)
- Coachella Valley portion of the SSAB (PM<sub>10</sub>)
- Imperial County portion of the SSAB (ozone and PM<sub>10</sub>)

On June 16, 2004, the federal conformity determination for the 2004 RTP was issued for the non-attainment and maintenance areas listed below. However, the effective date for the conformity determination for the entire SCAG 2004 RTP, including all of the air basins, was June 7, 2004.

- Ventura County portion of the SCCAB (ozone)
- Southeast Desert Modified Area (ozone)

The federal 8-hour ozone and PM<sub>2.5</sub> conformity determinations for the 2004 RTP and 2004 RTIP was issued by the federal agencies on May 12, 2005, and March 30, 2006, respectively.

On October 2, 2006, the federal agencies approved funding and determined conformity of the 2006 RTIP and 2004 RTP as amended by SCAG on February 2, 2006 and July 27, 2006.

## ***CONFORMITY TESTS AND FINDINGS***

Under the U.S. DOT Metropolitan Planning Regulations and EPA's Transportation Conformity Regulations, SCAG's 2008 RTIP needs to pass five tests:

- ✓ Consistency with SCAG's RTP  
(23 CFR, Section 450.324 of the U.S. DOT Metropolitan Planning Regulations)
- ✓ Regional Emission Analysis  
(40 CFR, Sections 93.109, 93.110, 93.118, and 93.119)
- ✓ Timely Implementation of Transportation Control Measures (TCMs) Analysis  
(40 CFR, Section 93.113)
- ✓ Financial Constraint Analysis  
(40 CFR, Section 93.108 and 23 CFR, Section 450.324)
- ✓ Interagency Consultation and Public Involvement Analysis  
(40 CFR, Sections 93.105 and 93.112 and 23 CFR, Section 450.324)

SCAG has made the following conformity findings for the Draft 2008 RTIP under the required federal tests:

- ✓ **Consistency with 2008 RTP Test**  
Finding: SCAG's Draft 2008 RTIP (project listing) is consistent with the 2008 RTP (policies, programs, and projects).
- ✓ **Regional Emissions Tests**  
These findings are based on the regional emissions test analyses shown in Tables 14 - 26 in Section II of this Technical Appendix.

Finding: The regional emissions analyses for the Draft 2008 RTIP update the regional emissions analyses for the 2006 RTIP and the 2008 RTP.

Finding: The Draft 2008 RTIP regional emissions analysis for PM<sub>2.5</sub> and its precursors meet all applicable emission budget tests for all milestone, attainment, and planning horizon years in the SCAB.

Finding: The Draft 2008 RTIP regional emissions for the ozone precursors meet all applicable emission budget tests for all milestone, attainment, and planning horizon years for the SCAB, SCCAB (Ventura County), Western MDAB (Antelope Valley and San Bernardino County portion excluding Searles Valley), SSAB (Coachella Valley and Imperial County portions).



Finding: The Draft 2008 RTIP regional emissions for NO<sub>2</sub> meet all applicable emission budget tests for all milestone, attainment, and planning horizon years in the SCAB.

Finding: The Draft 2008 RTIP regional emissions for CO meet all applicable emission budget tests for all milestone, attainment, and planning horizon years in SCAB.

Finding: The Draft 2008 RTIP regional emissions for PM<sub>10</sub> and its precursors meet all applicable emission budget tests for all milestone, attainment, and planning horizon years in SCAB and the SSAB (Coachella Valley).

Finding: The Draft 2008 RTIP regional emissions for PM<sub>10</sub> meet the interim emission test (build/no-build test) for all milestone, attainment and planning horizon years for the MDAB (San Bernardino County portion and Searles Valley portion) and for the SSAB (Imperial County portion).

✓ **Timely Implementation of TCM Test**

Finding: The TCM1 project categories listed in the 1994/1997/2003/2007 Ozone SIPs for the SCAB area were given funding priority and are on schedule for implementation or, if any obstacles to implementation have been identified, actions have been or are being taken to overcome such obstacles.

Finding: The TCM strategies listed in the 1994 (as amended in 1995) Ozone SIP for the SCCAB (Ventura County) were given funding priority and are on schedule for implementation or, if any obstacles to implementation have been identified, actions have been or are being taken to overcome such obstacles.

✓ **Financial Constraint Test**

Finding: The Draft 2008 RTIP is fiscally constrained.

✓ **Inter-agency Consultation and Public Involvement Test**

Finding: The Draft 2008 RTIP complies with all federal and state requirements for interagency consultation and public involvement. SCAG's Transportation Conformity Working Group serves as a forum for interagency consultation. Additionally, there are ad-hoc meetings held between the stakeholder agencies for this purpose. SCAG's adopted Public Participation Plan serves as a guide for SCAG's public involvement process as well as the continuing, comprehensive and coordinated planning process among the stakeholders to ensure the ongoing opportunity for broad-based participation in the development and review of regional plans and programs.

Three public hearings are scheduled for the Draft 2008 RTIP: June 12, 2008 (Riverside), June 19, 2008 (Los Angeles), and June 25, 2008 (Orange). Video conferencing sites are available for the June 12 (Los Angeles) and June 19 (El Centro, Ventura, and Riverside) hearings.

## **EXHIBIT A: MAPS**

- **Air Basins**
- **Air Districts**
- **Federal Non-attainment and Maintenance Areas**



San Bernardino

Mojave Desert Air Basin

South Central  
Coast Air Basin

Ventura

Los Angeles

South Coast Air Basin

Orange

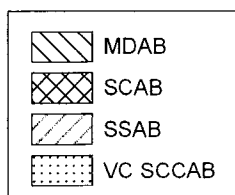
Riverside

Salton Sea Air Basin

Imperial

Mexico

## AIR BASINS in the SCAG Region



Source: California Air Resources Board and Air Districts





**Ventura County  
APCD**

Ventura

**Antelope Valley  
AQMD**

Los Angeles

**South Coast AQMD**

Orange

San Bernardino

**Mojave Desert AQMD**

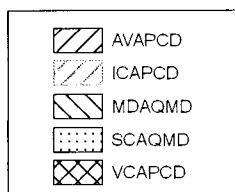
Riverside

**Imperial County APCD**

Imperial

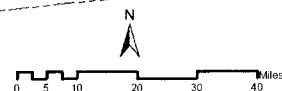
Mexico

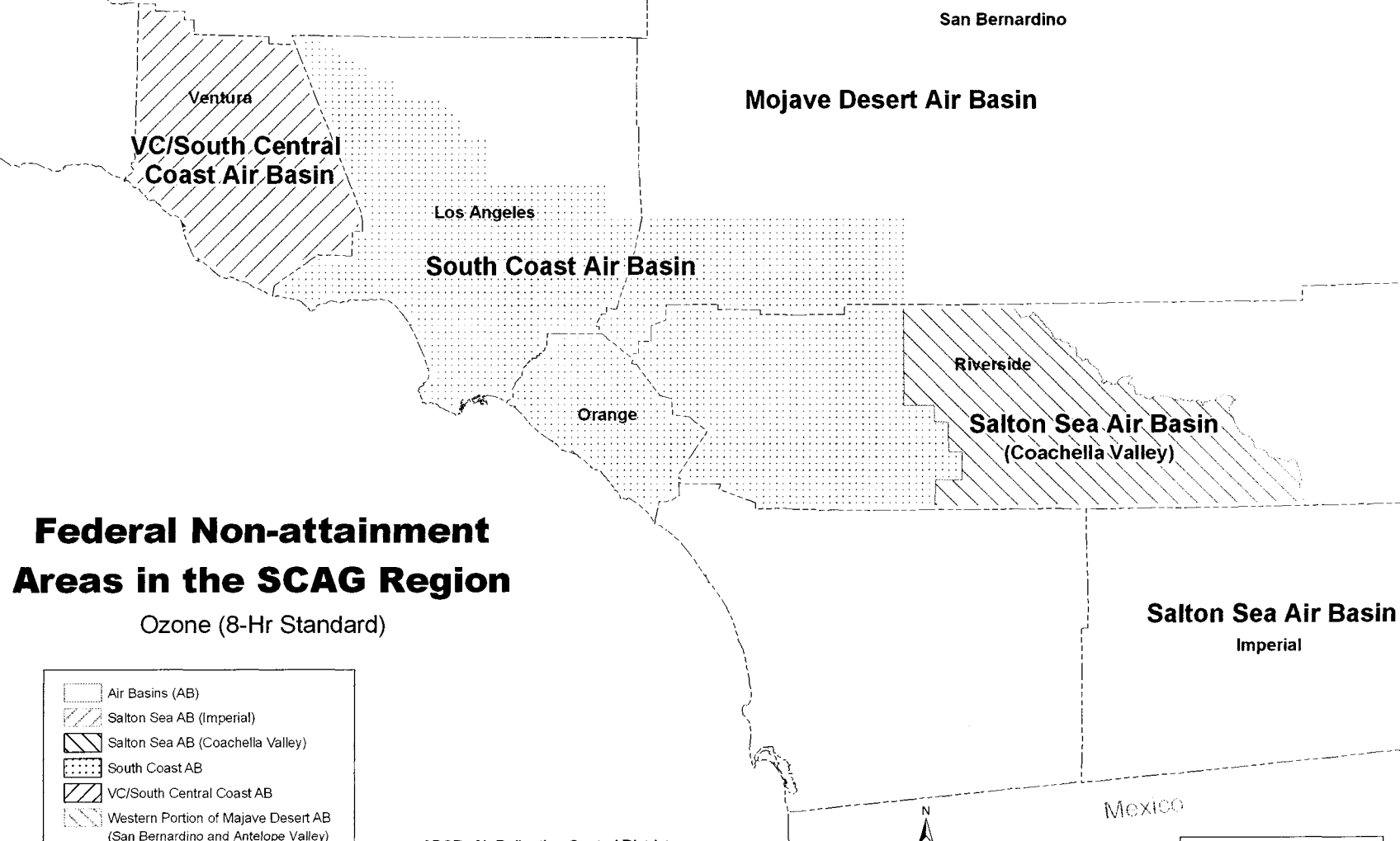
## **AIR DISTRICTS in the SCAG Region**



Source: California Air Resources Board and Air Districts

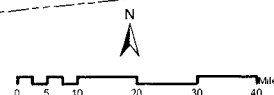
APCD: Air Pollution Control District  
AQMD: Air Quality Management District

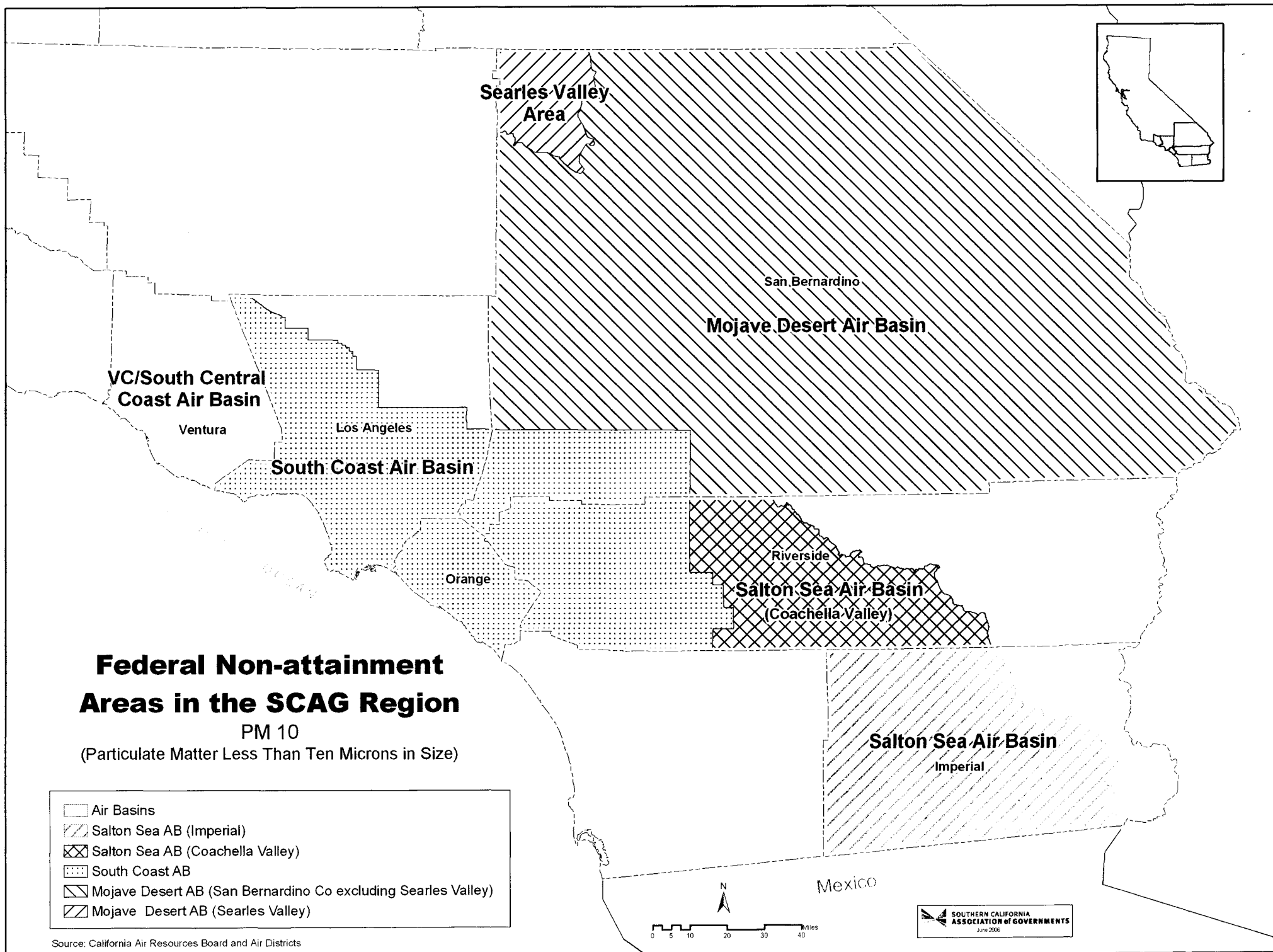


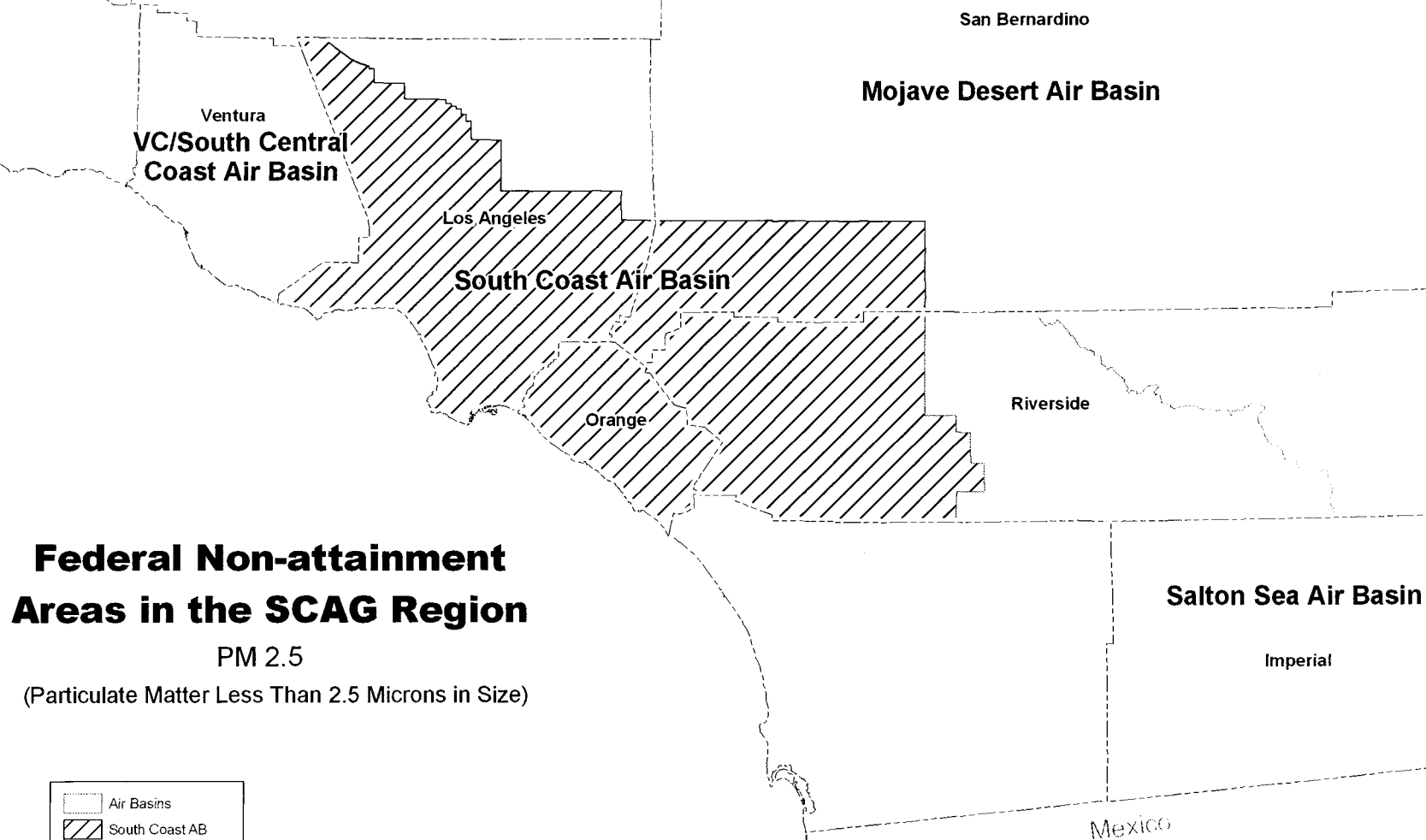


Source: California Air Resources Board and Air Districts

APCD: Air Pollution Control District  
AQMD: Air Quality Management District



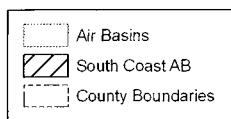




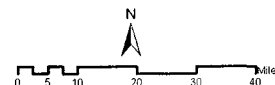
## Federal Non-attainment Areas in the SCAG Region

PM 2.5

(Particulate Matter Less Than 2.5 Microns in Size)



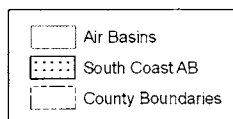
Source: Environmental Protection Agency (EPA)





# Federal Maintenance Areas in the SCAG Region

CO  
(Carbon Monoxide)



Source: Southern California Association of Governments

San Bernardino  
**Mojave Desert Air Basin**

Ventura  
**VC/South Central  
Coast Air Basin**

Los Angeles  
**South Coast Air Basin**

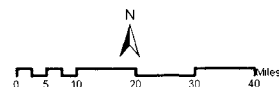
Orange

Riverside

**Salton Sea Air Basin**

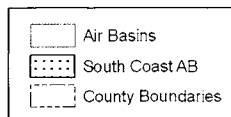
Imperial

Mexico



# Federal Maintenance Areas in the SCAG Region

NO<sub>2</sub>  
(Nitrogen Dioxide)



Source: California Air Resources Board and Air Districts



Ventura  
**VC/South Central  
Coast Air Basin**

Los Angeles  
**South Coast Air Basin**

Orange

San Bernardino

**Mojave Desert Air Basin**

Riverside

**Salton Sea Air Basin**

Imperial

Mexico